

AMMONIA COMPRESSOR PACKS PAQUETES DE COMPRESORES // AMONIACO

ACP // SCP

FOR INDUSTRIAL APPLICATIONS // PARA APLICACIONES INDUSTRIALES





60 Hz // VP-220-1



BITZER US Ammonia Compressor Packages

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BITZER US Factory (Flowery Branch, GA)



For more details on the BITZER ACP Products, see global brochure: SP-600

American Design Standards

- Adherence to US standards such as IIAR 2, ASHRAE 15, and ASME Design Codes
- NEMA Premium Efficiency Motors
 3 phase, 60 Hz
- Compressor Packages fabricated just outside of Atlanta, GA
- OEM Components mainly sourced from suppliers in the U.S.
- □ CRN's available for Canadian provinces

BITZER Software

www.bitzer-software.com

- Compressor sizing can be done through BITZER software
- □ Easily accessible via web (no download!)
- □ No password required!
- Quickly calculates cooling capacities, power inputs, oil separator szing, and tons more!
- Great resource for quickly finding BITZER documentation















BITZER US Ammonia Compressor Packages

To meet the demands of the industrial refrigeration market, BITZER US fabricates ammonia compressor packages for the North American and Latin American markets. Our robust capacity range allows for packages to be tailored to their specific design needs. Common application examples include ice rinks, process cooling, and cold storage.

Decisive Technical Features

- Highest Industry Part Load Efficiency
 - o Multiple compressor designs
 - Mechanical Unloading
 - o Automatic Vi (OS.A 95)
 - o VFD Ready
- High Efficiency Motors
- □ Superb Quality and Reliability
- Best in Class Energy Efficiency
 - o No suction check valve required

Special Highlights

- Utilizes BITZER ammonia screw compressors (OS.A series)
- Heavy duty industrial construction
- Highly configurable
- Compact design
 - Split frame design available for high capacity units, results in easy shipping
- □ Easy to access and service
- □ Redundant compressors, filters, and sensors





Additional Features

- Generation "Split Suction"
 - Operate one package at two different evaporating temperatures!
 - Multiple compressor packages can operate split suction despite sharing the same discharge and oil management
- Generation "Swing" Compressor
 - Ability to operate the same compressor at low OR medium temperatures depending on the system requirements
- Combine split suction & swing compressor for a unique and versatile 3 compressor solution
 - 1 LT + 1 MT / LT + 1 MT
- Booster versions for very low temp and twostage systems

Flexible Oil Cooling Options

- □ Thermosyphon or Water Cooled Oil Cooling via high efficiency plate-and-shell heat exchanger
- Liquid Injection also available!
 - Liquid injection utilizes a state of the art motorized valve station and controller for maintaining precise discharge temperature



Capacity Range (< 900 TR)





Capacity Range (< 150 TR)



Model Number Nomenclature

A C P 9 5 9 3 K - 2 V - H B E P

Series

ACP = Ammonia Compressor Package SCP = Screw Compressor Package

# Compressors	OS.A 53	OS.A 74	OS.A 85	OS.A 95
1	SCP	SCP	SCP	SCP
2	SCP	SCP	ACP	ACP
3	SCP	SCP	ACP	ACP

ACP9593K-2V-HBEP

Compressor Model

Frame Size / Displacement

ACP9593K-2V-HBEP

Application Range

K = Medium / High Temperature Range

N = Low Temperature Application

B = Booster Application

ACP9593K - 2V - HBEP

Number of Compressors

ACP9593K-2V-HBEP

Capacity Control Method

V = Variable frequency drive C = Capacity control (w/o VFD)

ACP9593K-2V-HBEP

Oil Cooling Method

H = Thermosyphon / Water Cooled

L = Liquid Injection A[C]P[9]5[9]3[K] - [2]V] - [H]B[E]P

Controller

B = w/Controller

A C P 9 5 9 3 K - 2 V - H B E P

Economizer

E = Economizer heat exchanger included

ACP9593K-2V-HBEP

Starter Panel

P = Soft-Starter or VFD panel included

Note: Model number does not fully define the complete extent of delivery.

Dimensional Information

Connection Positions

- 1 Suction line
- 2 Discharge line 3 Pressure relief
- 3 Pressure relief ports4 Oil cooler in
- 5 Oil cooler out
- 6 Liquid in (to Economizer)
- 7 Liquid out (from Economizer)
- 8 Oil drain
- 9 Oil fill
- 10 Pressure equalization line
- 11 Economizer out (to compressor)

Package Weights

_		1	2	3
SCD52	Min	2000	3000	5000
30755	Max	3000	4000	6000
SCD74	Min	3000	4000	6000
5CP74	Max	4000	6000	7000
ACP85	Min	3000	8000	11000
SCP85	Max	5000	11000	16000
ACP95	Min	5000	13000	17000
SCP95	Max	7000	15000	19000

Note: 1. Weights are in LBS

 Weight ranges rounded to the nearest thousand. Actual weights vary and can be provided upon request.



SCP53..1 // SCP74..1



SCP85..1



Series	Oil Sep	L (in)	W (in)	H (in)	A (in)
SCP531	500	92	43.5	71.5	26
SCP741	500	92	43.5	71.5	26
SCP851	500	115	42	71.5	26



SCP95..1



SCP53..2 // SCP74..2



SCP53..3 // SCP74..3



Series	Oil Sep	L (in)	W (in)	H (in)	A (in)	B (in)
SCP951	650	114	69	81.5	114	45
SCP532	500	112	67	80.5	38.5	112
SCP742	500	114.5	69	79.5	38.5	112
SCP533	500	129.5	67	82	38.5	120.5
SCP743	650	129.5	64.5	82	38.5	120.5

Bitzer



ACP85..2



ACP85..3



Series	Oil Sep	L (in)	W (in)	H (in)	A (in)	B (in)
ACP 852	650	83	100	73	78	67
ACP 853	650	121	100	79	67	116
ACP 853	800	116	105	79	67	116



ACP95..2



ACP95..3



Series	Oil Sep	L (in)	W (in)	H (in)	A (in)	B (in)
ACP952	800	90.5	106	95	91.5	90
ACP953	1000	144.5	132	100	99	133

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